

Professional Development

Power of Knowledge

Learning and Development

Learning and development encompasses a wide range of activities designed to improve the capabilities of people. Capabilities comprise not only the technical skills and knowledge people have, but also their attributes, attitudes and behaviours. Learning and development activities can be designed to deliver specific skills in a short period of time to meet an immediate need, or designed to achieve broader requirements over a longer period. Few activities to enable people to acquire new capabilities can include

- On-the-job training
- Development opportunities
- Special projects
- Conferences
- Secondments
- Mentoring, and
- Formal classroom training.

“Live as if you were to die tomorrow. Learn as if you were to live forever.”

Gandhi

"I never teach my pupils; I only attempt to provide the conditions in which they can learn."

Albert Einstein

“Tell me and I'll forget; show me and I may remember; involve me and I'll understand.”

Chinese Proverb

India – Scenario

Low labour-cost and a rich talent pool are distinct advantages available to India, clearly powering its global competitiveness as a knowledge-based society. Education and training are both strategic necessities, which will deliver employment-enhancing skills, in turn increasing productivity and accelerating the future economic growth of the country. The development of skills for 500 Million Indians in less than 10 years is



not only a matter of national urgency; it is astounding in its scale. Thus far, the development of skills has been driven by the requirements of the market; while much progress has been made with considerable help from the private sector, it is a travesty that little has been done to understand the needs of the learners, who are at the heart of the skills development mission.

Power Segment

Power is one of the key sectors driving India's infrastructure growth. Therefore, it is essential for the country's power sector to meet planned capacity additions and reduce power deficits to increasingly contribute to the country's GDP growth. According to statements by the Planning Commission it is imperative for the power sector to grow at 8.1 per cent per annum to attain an ambitious economic growth target of 9 per cent.

The biggest challenge of the power sector is the high T&D losses (Average about 35-40%). A combination of technical and non-technical factors is contributing to high Transmission and Distribution losses. Lack of consumer education, political interference, and inefficient use of electricity is further aggravating the problem.

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Overview of the Distribution Sector

Distribution is the key segment of electricity supply chain. The distribution sector caters to rural and urban areas.

Rural distribution segment in India is characterized by wide dispersal of network in large areas with long lines, high cost of supply, low paying capacity of the people, large number of subsidized customers, unmetered flat rate supply to farmers, non-metering due to high cost and practical difficulties, low load and low rate of load growth. Consumer mix in rural areas is mainly agriculture and residential.

Urban distribution is characterized by high consumer density, and higher rate of growth of load. The consumer mix in urban areas is mostly commercial, residential, and industrial.

Both segments are distinct with different problems and issues. In India the Electricity Act 2003 has recognized Rural Electrification as a separate entity.

Human resources and training issues

In many of the state owned utilities, recruitment has been either stopped or restricted since last 15 years. Average age of employee in most SEBs is more than 50 years. Lack of fresh talent and domain expertise impedes development of the sector and efficiency improvement. Induction of new technology in the field and office level also needs proper training for staff for efficient handling. Discoms need to **undertake training need analysis and roll out training programmes** for employees working in different areas.

Aston CPD

Aston CPD specialises in providing professional conferences and training courses tailored around the needs of delegates. Taking an informed approach to the professional development needs of your



Organisation will enable you to manage your business or department more effectively and help you to respond to changes in legislation, standards or other critical developments. Additionally, it will allow delegates to identify business and professional goals and the ways they can be achieved.

Distance Learning- Post Experience Certificate

Aston CPD Centre can tailor courses to meet the demand for busy practising Engineers and Planners. Opportunities provided by the latest communication technology and teaching aids make it possible to offer increasingly comprehensive courses by distance learning.

Our distance learning post experience certificates are of a postgraduate standard and are intended to contribute to the CPD requirements of the relevant professional institute. The certificates may be accepted by a number of universities as Advanced Prior Learning towards an MSc qualification.

The Distance Learning programmes are all flexible. You can start when you like and work at your own pace. We provide you with the latest professionally developed learning materials and you will be supported by expert practising professional tutors. All course materials are

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developed specifically to suit the needs of professional engineers.

Please click below for further information about our distance learning courses in the following subject areas;

Electricity Distribution Courses

OFFER 1 – A SIX MODULE COURSE LEADING TO THE CERTIFICATE OF COMPETENCE IN ELECTRICITY DISTRIBUTION

Module 1 Network Design

Module 2 Power Cables

Module 3 Overhead Lines

Module 4 HV Switchgear

Module 5 System Protection

Module 6 System Operation

OFFER 2 – A SINGLE MODULE COURSE ON SUBSTATION DESIGN, EARTHING AND BONDING

This six week course covers the design of distribution and primary substations up to 36kV including earthing and bonding and was developed in response to students requests.

OFFER 3 – A SINGLE MODULE COURSE ON POWER TRANSFORMERS AND TAPCHANGERS

This course covers power transformers both primary and distribution together with the associated off circuit and on line tap changers. The main focus is on transformers in the voltage range up to 33kV hence this course will be of most interest to students working in the distribution sector of the power industry. The course is intended to supplement the existing Certificate of Competence by Distance Learning course on Electricity Distribution.

A comprehensive assignment completes the course, which students should submit for marking and comment within six weeks.

All our Distance Learning programmes are all flexible. You can start when you like and work at your own pace. We provide you with the latest professionally developed learning materials and you will be supported by expert practising professional tutors. All course materials are developed specifically to suit the needs of professional engineers.

If you have any questions or queries please contact us –



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